
Subject: Re: memory vs cpu

Posted by [Craig Markwardt](#) on Thu, 13 Nov 2008 04:25:00 GMT

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On Nov 12, 7:15 am, aetherlux <aether...@gmail.com> wrote:

> Hi,
>
> I have detected a feature??? for all my programs written in IDL and I
> would like to have some feedback about if it is a possible problem
> with the code, hardware, etc.
>
> My usual configurations are:
> * idl 6.0 ; Debian GNU/Linux; core2 Quad 2.4; 4GB RAM
> * idl 6.0 ; Debian GNU/Linux; core 2 Duo 2.0; 2GB RAM
>
> 99.9% of the programs that I run suck 99% of the CPU and 0.1-0.2%. An
> example of a typical top output:
>
> PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+
> COMMAND
> 13964 juan 25 0 50296 5640 3432 R 100 0.2 21481:08 idl
>
> My typical code has several do and if loops, in some cases big arrays,
> and sometimes a hard work reading from files and written new ones. I
> usually include basic mathematical operations with floatings.
>
> I have basic knowledge of programming and I would like to know
> possible causes and if you think that it is possible to solve/improve
> it.

If you put 'WAIT, 1.0' at the end of your FOR loop, the percent CPU utilization will be a lot lower :-)

More seriously, you will need to learn how to vectorize your code. The first things to vectorize are the innermost loops.

Craig
